

# Safety Data Sheet

## Zetag® 8848FS (US)

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Version: 7.1

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(30481665/SDS\_GEN\_US/EN)

### 1. Identification

#### Product identifier used on the label

## Zetag® 8848FS (US)

#### Recommended use of the chemical and restriction on use

Recommended use\*: flocculation agent; Paper water management

\* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

#### Details of the supplier of the safety data sheet

##### Company:

BASF CORPORATION  
100 Park Avenue  
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

#### Emergency telephone number

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: 1-800-832-HELP (4357)

#### Other means of identification

Chemical family: Emulsion based on: polyacrylamide, cationic

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### 2. Hazards Identification

#### According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

#### Classification of the product

Skin Corr./Irrit.	2	Skin corrosion/irritation
Eye Dam./Irrit.	2B	Serious eye damage/eye irritation
Aquatic Acute	3	Hazardous to the aquatic environment - acute

#### Label elements

Pictogram:

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Signal Word:

Warning

Hazard Statement:

H320 Causes eye irritation.  
H315 Causes skin irritation.  
H402 Harmful to aquatic life.

Precautionary Statements (Prevention):

P280 Wear protective gloves.  
P273 Avoid release to the environment.  
P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P303 + P361 IF ON SKIN (or hair): Wash with plenty of soap and water.  
P332 + P313 If skin irritation occurs: Get medical advice/attention.  
P337 + P311 If eye irritation persists: Call a POISON CENTER or doctor/physician.  
P362 + P364 Take off contaminated clothing and wash before reuse.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

### Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

**According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

### Emergency overview

WARNING:

Causes eye irritation.

CAUSES SKIN IRRITATION.

Acute exposure to petroleum distillate vapour may cause dizziness, drowsiness, headache, nausea, and irritation of the respiratory tract. Prolonged and repeated exposure may cause central nervous system damage, as well as heart and blood disorders. Aspiration of petroleum distillates may cause chemical pneumonitis.

Prolonged exposure may cause dryness or cracking of the skin.

Prolonged or repeated contact may result in dermatitis.

Caution - Slippery when wet!

Use NIOSH approved respirator as needed to mitigate exposure.

Wear full face shield if splashing hazard exists.

Eye wash fountains must be easily accessible.

Wear chemical resistant protective gloves.

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### 3. Composition / Information on Ingredients

**According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

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<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
69418-26-4	20.0 - 50.0%	Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-propenamide
64742-47-8	20.0 - 50.0%	Distillates (petroleum), hydrotreated light
78330-21-9	1.0 - 5.0%	Alcohols, C11-14-iso-, C13-rich, ethoxylated
124-04-9	<= 1.0%	adipic acid

### According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
64742-47-8	20.0 - 50.0%	Distillates (petroleum), hydrotreated light
78330-21-9	1.0 - 5.0%	Alcohols, C11-14-iso-, C13-rich, ethoxylated

## 4. First-Aid Measures

### Description of first aid measures

#### General advice:

Immediately remove contaminated clothing.

#### If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

#### If on skin:

Wash affected areas thoroughly with soap and water. Seek medical attention.

#### If in eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

#### If swallowed:

Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

### Most important symptoms and effects, both acute and delayed

Symptoms: Eye irritation, skin irritation, CNS depression

Hazards: No hazard is expected under intended use and appropriate handling.

### Indication of any immediate medical attention and special treatment needed

#### Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

## 5. Fire-Fighting Measures

### Extinguishing media

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Suitable extinguishing media:  
dry powder, foam, water spray

Unsuitable extinguishing media for safety reasons:  
water jet

Additional information:

If water is used, restrict pedestrian and vehicular traffic in areas where slip hazard may exist.

### Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire. Spilled product is slippery underfoot. Very slippery when wet.

### Advice for fire-fighters

Protective equipment for fire-fighting:

Wear a self-contained breathing apparatus.

### Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

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## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Keep people away and stay on the upwind side.

### Environmental precautions

Do not discharge into drains/surface waters/groundwater.

### Methods and material for containment and cleaning up

Spills should be contained, solidified, and placed in suitable containers for disposal.

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## 7. Handling and Storage

### Precautions for safe handling

Keep away from sources of ignition - No smoking.

Protection against fire and explosion:

Take precautionary measures against static discharges.

### Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Storage stability:

Avoid extreme heat.

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### 8. Exposure Controls/Personal Protection

#### Components with occupational exposure limits

Distillates (petroleum), hydrotreated light	ACGIH TLV	TWA value 200 mg/m <sup>3</sup> Non-aerosol (total hydrocarbon vapor); Application restricted to conditions in which there are negligible aerosol exposures. Skin Designation Non-aerosol (total hydrocarbon vapor); The substance can be absorbed through the skin.
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adipic acid	ACGIH TLV	TWA value 5 mg/m <sup>3</sup> ;
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#### **Advice on system design:**

No applicable information available.

#### Personal protective equipment

##### **Respiratory protection:**

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

##### **Hand protection:**

Chemical resistant protective gloves

##### **Eye protection:**

Tightly fitting safety goggles (chemical goggles) and face shield.

##### **Body protection:**

Impermeable protective clothing

##### **General safety and hygiene measures:**

Handle in accordance with good industrial hygiene and safety practice. No eating, drinking, smoking or tobacco use at the place of work.

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### 9. Physical and Chemical Properties

Form:	emulsion	
Odour:	mineral oil-like	
Odour threshold:	No data available.	
Colour:	cream, almost white	
pH value:	approx. 4	
Melting point:	No data available.	
Boiling point:	No data available.	
Sublimation point:	No data available.	
Flash point:	> 100 °C	(ASTM D92)
	No flash point - Measurement made up to the indicated temperature, pilot light extinguishes. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.	
Flammability:	not highly flammable	

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Lower explosion limit:	not highly flammable For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.
Upper explosion limit:	For liquids not relevant for classification and labelling.
Autoignition:	not determined
Vapour pressure:	No data available.
Density:	approx. 1.0 g/cm <sup>3</sup> ( 20 °C)
Relative density:	No data available.
Vapour density:	No data available.
Partitioning coefficient n-octanol/water (log Pow):	Study scientifically not justified.
Self-ignition temperature:	not self-igniting
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	1,000 - 1,500 mPa.s
Viscosity, kinematic:	> 20.5 mm <sup>2</sup> /s ( 40 °C) The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
% volatiles:	23.9 %
Solubility in water:	dispersible
Miscibility with water:	of low solubility
Solubility (quantitative):	No data available.
Solubility (qualitative):	No data available.
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.

## 10. Stability and Reactivity

### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties:

not fire-propagating

### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Peroxides: 0.000 %

The product does not contain peroxides.

### Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

The product is chemically stable.

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### Conditions to avoid

Avoid extreme temperatures. Avoid freezing. Avoid all sources of ignition: heat, sparks, open flame.

### Incompatible materials

reactive chemicals

### Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

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## 11. Toxicological information

### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

### Acute Toxicity/Effects

#### Acute toxicity

Assessment of acute toxicity: No known acute effects.

#### Oral

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

The product has not been tested. The statement has been derived from the properties of the individual components.

#### Irritation / corrosion

Assessment of irritating effects: Irritating to eyes and skin.

#### Skin

Species: rabbit

Result: Irritant.

Method: OECD Guideline 404

#### Eye

Species: rabbit

Result: Irritant.

#### Sensitization

Assessment of sensitization: Based on the ingredients, there is no suspicion of a skin-sensitizing potential.

#### Aspiration Hazard

No aspiration hazard expected.

### Chronic Toxicity/Effects

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### Repeated dose toxicity

Assessment of repeated dose toxicity: Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statement has been derived from the properties of the individual components.

### Genetic toxicity

Assessment of mutagenicity. Based on the ingredients, there is no suspicion of a mutagenic effect.

### Carcinogenicity

Assessment of carcinogenicity: None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen. The whole of the information assessable provides no indication of a carcinogenic effect.

### Reproductive toxicity

Assessment of reproduction toxicity: Based on the ingredients, there is no suspicion of a toxic effect on reproduction.

### Teratogenicity

Assessment of teratogenicity: No teratogenic effects reported.

### Other Information

The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

## **Symptoms of Exposure**

Eye irritation, skin irritation, CNS depression

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## **12. Ecological Information**

### **Toxicity**

#### Aquatic toxicity

Assessment of aquatic toxicity:  
Acutely harmful for aquatic organisms.

#### Toxicity to fish

LC50 (96 h) 10 - 100 mg/l, *Oncorhynchus mykiss*  
(under static conditions in the presence of 10 mg/L humic acid) The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

#### Aquatic invertebrates

EC50 (48 h) 10 - 100 mg/l, daphnia  
(under static conditions in the presence of 10 mg/L humic acid)

#### Aquatic toxicity

*Information on: cationic polyacrylamide*

*Assessment of aquatic toxicity:*

*The hydrolysis products are not acutely harmful to aquatic organisms. Acute effects on aquatic organisms are due to the cationic charge of the polymer, which is quickly neutralised in natural water courses by irreversible adsorption onto particles, hydrolysis and dissolved organic carbon. Fish toxicity and aquatic toxicity are drastically reduced by rapid irreversible adsorption onto suspended and/or dissolved organic matter.*

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### Persistence and degradability

#### Assessment biodegradation and elimination (H<sub>2</sub>O)

Not readily biodegradable (by OECD criteria). The substance can be virtually eliminated from water in suitable effluent treatment plants by biodegradation, stripping and mechanical separation.

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#### Information on Stability in Water (Hydrolysis)

*Information on: cationic polyacrylamide  
(pH value > 6)*

*In contact with water the substance will hydrolyse rapidly.*

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### Bioaccumulative potential

#### Assessment bioaccumulation potential

Based on its structural properties, the polymer is not biologically available. Accumulation in organisms is not to be expected.

### Mobility in soil

#### Assessment transport between environmental compartments

No data available.

*Information on: cationic polyacrylamide*

*Adsorption to solid soil phase is expected.*

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### Additional information

#### Sum parameter

Chemical oxygen demand (COD):  
not determined

Other ecotoxicological advice:

Must not be discharged into the environment. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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## 13. Disposal considerations

### **Waste disposal of substance:**

Dispose of in accordance with national, state and local regulations. Do not discharge into drains/surface waters/groundwater.

### **Container disposal:**

Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Dispose of in accordance with national, state and local regulations.

### **RCRA:**

Not a hazardous waste under RCRA (40 CFR 261).

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### 14. Transport Information

#### Land transport

USDOT

Not classified as a dangerous good under transport regulations

#### Sea transport

IMDG

Not classified as a dangerous good under transport regulations

#### Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

### 15. Regulatory Information

#### Federal Regulations

##### Registration status:

Chemical TSCA, US released / listed

**EPCRA 311/312 (Hazard categories):** Acute;

#### State regulations

##### State RTK

PA

MA

NJ

##### CAS Number

64742-47-8

64742-47-8

64742-47-8

##### Chemical name

Distillates (petroleum), hydrotreated light

Distillates (petroleum), hydrotreated light

Distillates (petroleum), hydrotreated light

#### **CA Prop. 65:**

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

#### **NFPA Hazard codes:**

Health : 2 Fire: 1 Reactivity: 0 Special:

#### **HMIS III rating**

Health: 2 Flammability: 1 Physical hazard: 0

### 16. Other Information

#### **SDS Prepared by:**

BASF NA Product Regulations

SDS Prepared on: 2015/10/14

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in

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a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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